

Docket No.: 114232.10



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PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Leland SHAPIRO

Appl. No. 09/518,081

Filed: March 3, 2000

For: **Methods And Compositions For Inhibiting Apoptosis**

Group Art Unit: 1646

Examiner: Unassigned

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of
Patents and Trademarks
Washington, D. C 20231

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. The references are from the International Search Report or from co-pending applications: 09/518,098; 09/518,076; and 09/518,097. It is respectfully requested that the documents be expressly considered and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

AUTHORIZATION

This Information Disclosure Statement is being filed before receipt of the first Office Action. No fee is required.

The Commissioner is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment to deposit account no. 50-0436.

Respectfully submitted,

PEPPER HAMILTON LLP

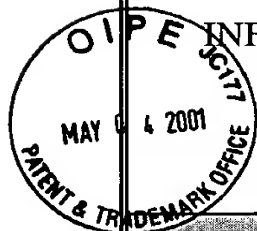


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Date: May 4, 2001

DC: #181742 v1 3W8#01!.WPD 114232-104



INFORMATION DISCLOSURE
CITATION IN AN
APPLICATION
(PTO-1449)

ATTY. DOCKET NO.
114232.104

SERIAL NO.
09/518,081

APPLICANT
Leland SHAPIRO

FILING DATE
March 3, 2000

GROUP
1646

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS		PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	AA	4,021,472	5/3/77	Fuji et al			
	AB	4,051,842	10/4/977	Hazel et al.			
	AC	4,140,122	2/20/79	Kuhl et al.			
	AD	4,224,342	9/23/80	Fuji et al			
	AE	4,283,418	8/11/81	Fuji et al			
	AF	4,310,533	1/12/82	Uegai et al			
	AG	4,383,529	5/17/83	Webster			
	AH	4,629,567	12/16/86	Bollen et al.			
	AI	4,668,504	5/26/87	Kahan et al.			
	AJ	4,711,848	12/8/87	Insley et al.			
	AK	4,713,224	12/15/87	Tamhankar et al.			
	AL	4,732,973	3/22/88	Barr et al			
	AM	4,760,130	7/26/88	Thompson et al.			
	AN	4,788,603	11/29/88	Fujimura et al.			
	AO	4,829,052	5/9/89	Glover et al.			
	AP	4,839,283	6/13/89	Kawasaki et al			
	AQ	4,843,094	6/27/89	Imaki et al			
	AR	4,889,723	12/26/89	Kim et al			
	AS	4,931,279	6/5/90	Bawa et al.			
	AT	4,963,654	10/16/90	Katunuma			
	AU	5,004,612	4/2/91	Kim et al			
	AV	5,077,428	12/31/91	Imaki et al			
	AW	5,110,602	5/5/92	Kim et al			
	AX	5,157,019	10/23/92	Glover et al.			
	AY	5,175,253	12/29/92	Fallon et al.			
	AZ	5,214,191	5/25/93	Kirschenheuter et al			
	AAA	5,240,956	8/31/93	Kirschenheuter et al			
	AAB	5,247,084	9/21/93	Imaki et al			
	AAC	5,281,617	1/25/94	Kirschenheuter et al			

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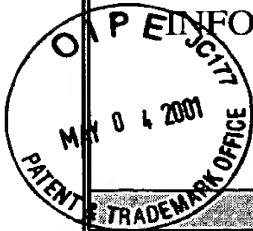
U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS		PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	AAD	5,314,910	5/24/94	Kirschenheuter et al			
	AAE	5,376,655	12/27/94	Imaki et al			
	AAF	5,399,346	3/21/95	Anderson et al.			
	AAG	5,416,191	5/16/95	Cheronis et al			
	AAH	5,420,110	5/30/95	Miller et al.			
	AAI	5,432,178	7/11/95	Nakai et al			
	AAJ	5,470,970	11/28/95	Saeger et al.			
	AAK	5,476,995	12/19/95	Clark et al			
	AAL	5,478,727	12/26/95	Roizman et al			
	AA M	5,486,470	1/23/96	Darke et al			
	AAN	5,514,653	5/7/96	Perlmutter			
	AAO	5,514,713	5/7/96	Nakai et al			
	AAP	5,529,920	6/25/96	Cole et al.			
	AAQ	5,532,215	7/2/96	Lezdey et al.			
	AAR	5,565,334	10/15/96	Kufe et al			
	AAS	5,593,858	1/14/97	Fleer et al			
	AAT	5,604,201	2/18/97	Thomas et al.			
	AAU	5,610,140	3/11/97	Goodfellow et al			
	AAV	5,610,285	3/11/97	Lebing et al.			
	AA W	5,614,555	3/25/97	Nakai et al			
	AAX	5,616,693	4/1/97	Hwang et al.			
	AAZ	5,618,792	4/8/97	Gyorkos et al.			
	AAZ	5,622,984	4/22/97	Nakai et al			
	ABA	5,635,593	6/3/97	Cheronis et al			
	ABB	5,641,670	6/24/97	Treco et al			
	ABC	5,663,416	9/2/97	Kirschenheuter et al			

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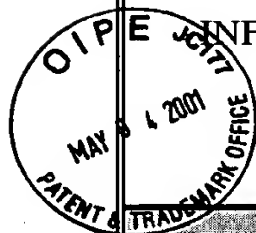


INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)				ATTY. DOCKET NO. 114232.104		SERIAL NO. 09/518,081	
				APPLICANT Leland SHAPIRO			
				FILING DATE March 3, 2000		GROUP 1646	
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS		PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	ABD	5,665,589	9/9/97	Harris et al			
	ABE	5,700,779	12/23/97	Goodfellow et al			
	ABF	5,710,026	1/20/98	Sprecher			
	ABG	5,712,117	1/27/98	Sprecher			
	ABH	5,747,645	6/6/98	Sprecher			
	AJI	5,750,506	5/12/98	Goodfellow et al			
	ABJ	5,759,548	6/2/98	Bathurst et al.			
	ABK	5,780,009	7/14/98	Karatzas et al			
	ABL	5,798,442	8/25/98	Gallant et al.			
	ABM	5,801,148	9/1/??	Gyorkos et al			
	ABN	5,807,829	9/15/98	Gyorkos et al			
	ABO	5,811,241	9/22/98	Goodfellow et al			
	ABP	5,817,484	10/6/98	Yu et al			
	ABQ	5,834,431	11/10/98	Stewart et al			
	ABR	5,843,900	12/1/98	Cheronis et al			
	ABS	5,849,863	12/15/98	Stewart et al			
	ABT	5,861,299	1/19/99	Archibald et al			
	ABU	5,861,380	1/19/99	Gyorkos et al.			
	ABV	5,863,899	1/26/99	Cheronis et al			
	ABW	5,869,455	2/9/99	Gyorkos et al.			
	ABX	5,874,424	2/23/99	Batchelor et al.			
	ABY	5,891,852	4/6/99	Gyorkos et al			
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							Yes	No
	BA	WO 98/56821	12/17/98	PCT				
	BB	WO 98/20034	5/14/98	PCT				
	BC	WO 98/23565	6/4/98	PCT				
	BD	WO 98/50342	11/12/98	PCT				
	BE	WO 98/50420	11/12/98	PCT				
	BF	WO 97/21690	6/19/97	PCT				
	BG	WO 97/10231	3/20/97	PCT				
	BH	WO 97/03679	2/6/97	PCT				
	BI	WO 98/22619	5/28/98	PCT				
	BJ	WO 98/22098	5/28/98	PCT				
	BK	WO 97/48706	12/24/97	PCT				
	BL	WO 97/33996	9/18/97	PCT				
	BM	WO 98/46597	10/22/98	PCT				
	BN	WO 97/24339	7/10/97	PCT			Abstr	
	BO	WO 98/21186	5/22/98	PCT				
	BP	WO98/09206	3/5/98	PCT			Abstr	
	BQ	WO95/28422	10/26/95	PCT				
	BR	WO95/34538	12/21/95	PCT				
	BS	WO96/12021	4/25/96	PCT				
	BT	WO96/14067	5/17/96	PCT				
	BU	WO97/09346	3/13/97	PCT				
	BV	WO97/09347	3/13/97	PCT				
	BW	WO97/10222	3/20/97	PCT				
	BX	WO97/31937	9/4/97	PCT				
	BY	WO97/37969	10/16/97	WO				
	BZ	WO97/49679	12/31/97	WO				
	BBA	WO97/45402	12/4/97	WO				
	BBB	WO98/06417	2/29/98	PCT				
	BBC	WO98/49190	11/5/98	PCT				
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							Yes	No
BBD		WO99/41231	8/19/99	WO				
BBE		WO00/52034						
BBF		WO99/43308	9/2/99					
BBG		WO94/07525		WO				
EXAMINER				DATE CONSIDERED				

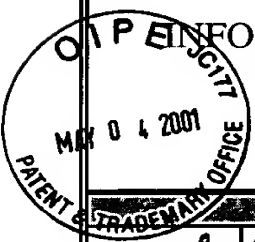
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		FILING DATE March 3, 2000	GROUP 1646
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
✓	CA	Adelman S.F. et al., "Protease inhibitors suppress fibrinolytic activity of herpesvirus-transformed cells", <i>J Gen Virol</i> , 1982 , 60(Pt 1):15-24.	
✓	CB	Altieri, D.C. <i>J Leukoc Biol</i> 1995, 58, 120127	
✓	CC	Anderson ED, Thomas L, Hayflick JS, Thomas G., "Inhibition of HIV-1 gp160-dependent membrane fusion by a furin-directed alpha 1-antitrypsin variant", <i>J Biol Chem</i> , 268(33):24887-91 (Nov 25, 1993)	
✓	CD	Aoki H, Akaike T, Abe K, Kuroda M, Arai S, Okamura R, Negi A, Maeda H. <i>Antiviral effect of oryzacystatin, a proteinase inhibitor in rice, against herpes simplex virus type 1 in vitro and in vivo</i> . <i>Antimicrob Agents Chemother</i> 1995 Apr;39(4):846-9	
✓	CE	Auerswald et al., "K15R M52E) aprotinin is a weak Kunitz-type inhibitor of HIV-1 replication in H9 cells" <i>Biomed Biochim Acta</i> , 1991 , 50(4-6):697-700.	
✓	CF	Auerswald et al., "Recombinant leech-derived tryptase inhibitor: construction, production, protein chemical characterization and inhibition of HIV-1 replication", <i>Biol Chem Hoppe Seyler</i> , 375(10):695-703 (1994)	
✓	CG	Avril, et al., "Identification of the U-937 membrane-associated proteinase interacting with the V3 loop of HIV-1 gp120 as cathepsin G", <i>FEBS Lett</i> , 1994 , 345(1):81-6.	
✓	CH	Avril LE, Di Martino-Ferrer M, Barin F, Gauthier F., "Interaction between a membrane-associated serine proteinase of U-937 monocytes and peptides from the V3 loop of the human immunodeficiency virus type 1 (HIV-1) gp120 envelope glycoprotein", <i>FEBS Lett</i> , 317(1-2):167-72 (Feb 8, 1993)	
✓	CI	Banfi G, Pirali A, Locatelli M, Murone M, Bonini PA., "Tumor-associated trypsin inhibitor in induced and acquired immunodeficiency. Studies on transplanted and HIV-infected patients", <i>Scand J Clin Lab Invest</i> , 51 Suppl, 207:55-8 (1991)	
✓	CJ	Beck, K.F. et al. in <i>J Exp Biol</i> 1999, 202, 64553	
✓	CK	Bjorck L, Grubb A, Kjellen L. Cystatin C, a human proteinase inhibitor, blocks replication of herpes simplex virus. <i>J Virol</i> 1990 Feb;64(2):941-3	
✓	CL	Bourinbaiar AS, Lee-Huang S., "Acrosin inhibitor, 4'-(acetamidophenyl 4-guanidinobenzoate, an experimental vaginal contraceptive with anti-HIV activity", <i>Contraception</i> , 51(5):319-22 (May 1995)	
✓	CM	Bourinbaiar AS, Nagorny R., "Effect of serine protease inhibitor, N-alpha-tosyl-L-lysyl-chloromethyl ketone (TLCK), on cell-mediated and cell-free HIV-1 spread", <i>Cell Immunol</i> , 155(1):230-6 (Apr 15, 1994)	
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✓	CN	Bratt J, Palmblad J. Cytokine-induced neutrophil 5 mediated injury of human endothelial cells. <i>J Immunol</i> 1997 Jul 15; 159(2):812-8	
✓	CO	Brinkmann T, Schafers J, Gurtler L, Kido H, Niwa Y, Katunuma N, Tschesche H., "Inhibition of tryptase TL2 from human T4+ lymphocytes and inhibition of HIV-1 replication of H9 cells by recombinant aprotinin and bikunin homologues", <i>J Protein Chem</i> , 16(6):651-60 (Aug 1997)	
✓	CP	Bristow CL, Fiscus SA, Flood PM, Arnold RR.; "Inhibition of HIV-1 by modification of a host membrane protease", <i>Int Immunol</i> , 7(2):239-49 (Feb 1995)	
✓	CQ	Bukrinskaia AG, Korneeva MN, Nosik DN, Zhdanov VM., "Inhibition of HIV reproduction in cultured cells using proteolysis inhibitors", <i>Vopr Virusol</i> , 34(1):53-5 (Jan-Feb 1989)	
✓	CR	Bukrinskaia AG, Kitsak Vla, Moisiadi SA, Arakelov SA. <i>Suppression of rotavirus SA-II reproduction by protease inhibitors in cell culture</i> . <i>Vopr Virusol</i> 1987 Jan-Feb;32(1):71-4	
✓	CS	Carroccio A, Fontana M, Spagnuolo MI, Zuin G, Montalto G, Canani RB, Verghi F, Di Martino D, Bastoni K, Buffardi F, Guarino A., "Pancreatic dysfunction and its association with fat malabsorption in HIV infected children", <i>Gut</i> , 43(4):558-63 (Oct 1998)	
	CT	Chesnokova NB, Maichuk YF. <i>Antiproteases in herpetic keratitis</i> . <i>Metab Pediatr Syst Ophthalmol</i> 1986;9(1):593-6	
	CU	Chesnokova NB, Kasavina BS, Maichuk luF, Kazachenko MA, Shchipanova AI. <i>Main proteolytic inhibitors in ocular herpes</i> . <i>Vopr Med Khim</i> 1981 Sep-Oct;27(5):663-5	
	CV	Cilberto et al., 1995, <i>Cell</i> , 41:531-540	
✓	CW	Cordiali Fei et al., "Behavior of several 'progression markers' during the HIV-Ab seroconversion period. Comparison with later stages", <i>J Biol Regul Homeost Agents</i> , 6(2):57-64 (Apr-Jun 1992)	
	CX	Cox et al., "Synergistic combinations and peptides in the inhibition of human immunodeficiency virus", <i>Adv Enzyme Regul</i> , 31:85-97 (1991)	
	CY	Deam DR, Byron KA, Ratnaie S, Campbell DG, Mulhall BP, Mackay IR., "Alpha I-antitrypsin phenotypes in homosexual men", <i>Pathology</i> , 21(2):91-2 (Apr 1989)	
✓	CZ	Decroly E, Wouters S, Di Bello C, Lazure C, Ruyschaert JM, Seidah NG., "Identification of the paired basic convertases implicated in HIV gp 160 processing based on in vitro assays and expression in CD4(+) cell lines", <i>J Biol Chem</i> , 271(48):30442-50 (Nov 1996)	
	CAA	Dery, O. and Bunnett, N.W. <i>Biochem Soc Trans</i> 1999, 27, 246-254	
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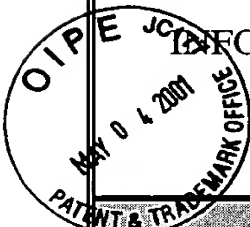
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•	CAB	Dery, O. et al. <i>Am J Physiol</i> 1998, 274, C 1429-C 1452	
•	CAC	DiIanni CL, Drier DA, Deckman IC, McCann PJ 3d, Liu F, Roizinan B, Colonno RJ, Cordingley MG. Identification of the herpes simplex virus-I protease cleavage sites by direct sequence analysis of autoproteolytic cleavage products. <i>Biol Chem</i> 1993 Jan 25;268(3):2048-51	
✓	CAD	DiIanni CL, Stevens JT, Bolgar M, O'Boyle DR 2nd, Weinheimer SP, Colonno RJ. Identification of the serine residue at the active site of the herpes simplex virus type 1 protease. <i>J Biol Chem</i> 1994 Apr 29;269(17):12672-6	
•	CAE	Ding, A. et al., in <i>J. Immunol.</i> 1990, 145, 940	
✓	CAF	Estaquier J, Tanaka M, Suda T, Nagata S, Golstein P, Ameisen JC. Fas-mediated apoptosis of CD4+ and CD8+ T cells from human immunodeficiency virus-infected persons: differential in vitro preventive effect of cytokines and protease antagonists. <i>Blood</i> 1996 Jun 15;87(12):4959-66	
•	CAG	Flaitz CM, Hicks MJ. "Molecular piracy: the viral link to carcinogenesis." <i>Oral Oncol</i> 1998 Nov;34(6):448-53	
✓	CAH	Franzusoff A, Volpe AM, Josse D, Pichuanes S, Wolf JR., "Biochemical and genetic definition of the cellular protease required for HIV-1 gp160 processing", <i>J Biol Chem</i> 1995 Feb 17;270(7):3154-9	
✓	CAI	Glozman VN, "Immunologic foundation of enzyme therapy of patients with orchiepididymitis", <i>Antibiot Khimioter</i> , 35(7):50-52 (Jul 1990)	
✓	CAJ	Glynn JM, McElligott DL, Mosier DE. Apoptosis induced by HIV 5 infection in H9 T cells is blocked by ICE-family protease inhibition but not by a Fas(CD95) antagonist. <i>J Immunol</i> 1996 Oct 1;157(7):2754-2758	
•	CAK	Goureau, O. et al., in <i>Proc. Natl. Acad. Sci. U.S.A.</i> 1993, 90, 4276	
✓	CAL	Griffin, William C., "Calculation of HLB Values of Non-Ionic Sufactants", [H. L. B. - The Hydrophilic-Lipophilic Balance], <i>J. Soc. Cos. Met. Chem.</i> , Vol. 5, p. 249 (1954)	
✓	CAM	Gu M, Rappaport J, Leppla SH., "Furin is important but not essential for the proteolytic maturation of gp160 of HIV-1", <i>FEBS Lett</i> , 22;365(1):95-7 (May 10, 1995)	
✓	CAN	Hallenberger S, Bosch V, Angliker H, Shaw E, Klenk HD, Garten W., "Inhibition of furin-mediated cleavage activation of HIV-1 glycoprotein gp160", <i>Nature</i> , 26;360(6402):358-61(Nov 26, 1992)	
✓	CAO	Harvima et al., "Separation and partial characterization of proteinases with substrate specificity for basic amino acids from human MOLT-4 T lymphocytes: identification of those inhibited by variable-loop-V3 peptides of HIV-1 (human immunodeficiency virus-1) envelope glycoprotein", <i>Biochem J</i> , 292 (Pt 3):711-8 (1993)	
•	CAP	Heck, D. E. et al., in <i>J. Biol. Chem.</i> 1990, 267, 21277	
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✓	CAQ	Holwerda BC. Herpesvirus proteases: targets for novel antiviral drugs. Antiviral Res 1997 Jun;35(1):1-21	
✓	CAR	Inocencio et al., "Endoprotease activities other than furin and PACE4 with a role in processing of HIV-1 gp160 glycoproteins in CHO-K1 cells", J Biol Chem, 272(2):1344-8 (1997)	
✓	CAS	Kamoshita K, Shiota M, Sasaki M, Koga Y, Okumura Y, Kido H., "Calcium requirement and inhibitor spectrum for intracellular HIV type 1 gp160 processing in cultured HeLa cells and CD4+ lymphocytes: similarity to those of viral envelope glycoprotein maturase", J Biochem, Jun;117(6):1244-53 (Tokyo Jun 1995)	
✓	CAT	Kennedy S, Davis C, Abrams WR, Billings PC, Nagashunmugam T, Friedman H, Malamud D., "Submandibular salivary proteases: lack of a role in anti-HIV activity", J Dent Res, 77(7):1515-9 (Jul 1998)	
✓	CAU	Kido H, Fukutomi A, Katunuma N., "A novel membrane-bound serine esterase in human T4+ lymphocytes immunologically reactive with antibody inhibiting syncytia induced by HIV-1. Purification and characterization", J Biol Chem., 15:265 (35):21979-85 (Dec 1990)	
✓	CAV	Kido H, Niwa Y, Beppu Y, Towatari T. Cellular proteases involved in the pathogenicity of enveloped animal viruses, human immunodeficiency virus, influenza virus A and Sendai virus. Adv Enzyme Regul 1996;36:325-47	
✓	CAW	Kirkeboen, K.A. and Strand, O.A. in Acta Anaesthesiol Scand 1999, 43, 275	
✓	CAX	Koito A, Hattori T, Murakami T, Matsushita S, Maeda Y, Yamamoto T, Takatsuki K., "A neutralizing epitope of human immunodeficiency virus type 1 has homologous amino acid sequences with the active site of interalpha-trypsin inhibitor", Int Immunol, 1(6):613-8 (1989)	
✓	CAY	Langer, R. Nature 1998, 392, 5	
✓	CAZ	Lima AA, Silva TM, Gifoni AM, Barrett I-J, McAuliffe IT, Bao Y, Fox JW, Fedorko DP, Guerrant RL., "Mucosal injury and disruption of intestinal barrier function in HIV-infected individuals with and without diarrhea and cryptosporidiosis in northeast Brazil", Am J Gastroenterol, 92(10):1861-6 (Oct 1997)	
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	INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)		ATTY. DOCKET NO. 114232.104	SERIAL NO. 09/518,081
			APPLICANT Leland SHAPIRO	
			FILING DATE March 3, 2000	GROUP 1646
	OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
✓	CBA	Lomas DA, Elliott PR, Carrell RW. <i>Commercial plasma alphas-1 antitrypsin (Prolastin) contains a conformationally inactive, latent component.</i> Eur Respir J 1997 Mar;10(3):672-5		
•	CBB	Lowenstein, C. J. and Snyder, S.H. in <i>Cell</i> 1992, 70, 705-707		
•	CBC	Lowenstein C. J. et al. in <i>Proc. Natl. Acad. Sci. USA</i> , 1993, 90, 9730		
•	CBD	McCall, T.B. et al., in <i>Biochem. Biophys. Res. Commun.</i> 1992, 186, 680		
✓	CBE	McNeely TB, Dealy M, Dripps DJ, Orenstein JM, Eisenberg SP, Wahl SM, "Secretory leukocyte protease inhibitor: a human saliva protein exhibiting anti-human immunodeficiency virus 1 activity in vitro", <i>J Clin Invest</i> , 96(1):456-64 (Jul 1995)		
✓	CBF	Meki AR, Mohey El-Dean ZM. <i>Serum interleukin-1beta, interleukin-6, nitric oxide and alphas-1 antitrypsin in scorpion envenomed children.</i> Toxicon 1998 Dec;36(12):1851-9		
✓	CBG	Merrifield, R.B., "Solid Phase Peptide Synthesis. 1. The Synthesis of a Tetrapeptide", <i>J. Am. Chem. Soc.</i> Vol. 85, p. 2149 (1963)		
•	CBH	Meylan et al., "HIV infectivity is not augmented by treatment with trypsin, Factor Xa or human mast-cell tryptase", <i>AIDS</i> , 6(1):128-30 (1992)		
•	CBI	Miranda et al., "Isolation of the human PC6 gene encoding the putative host protease for HIV-1 gp160 processing in CD4+ T lymphocytes", <i>Proc Natl Acad Sci U S A</i> , 93(15):7695-7700 (1996)		
✓	CBJ	Molle W. et al. in <i>J Immunol</i> 1997, 159, 3555		
✓	CBK	Moulard M, Achstetter T, Kieny MP, Montagnier L, Bahraoui E, "Kex2p: a model for cellular endoprotease processing human immunodeficiency virus type 1 envelope glycoprotein precursor", <i>Eur J. Biochem</i> , 225(2):565-72 (Oct 15, 1994)		
•	CBL	Nathan, C. in <i>FASEB J.</i> 1992, 6, 3051		
✓	CBM	Novradovsky A, Brantly ML, Wacławski MA, Chaudhary PP, Ihara H, Qi L, Tony Eissa N, Barnes PM, Gabriele KM, Ehrmantraut ME, Rogliani P, Moss J. <i>Endothelial Nitric Oxide Synthase as a Potential Susceptibility Gene in the Pathogenesis of Emphysema in alphas-1 Antitrypsin Deficiency.</i> <i>Am J Respir Cell Mol Biol</i> 1999 Mar 1;20(3):441-447		
•	CBN	Ohnishi et al., "A furin-defective cell line is able to process correctly the gp160 of human immunodeficiency virus type 1", <i>J Virol</i> , 68(6):4075-99 (1994)		
•	CBO	Okumura et al., "The extracellular processing of HIV-1 envelope glycoprotein gp160 by human plasmin", <i>FEBS Lett</i> , 442(1):39-42 (1998)		
✓	CBP	Ooka T, Hatano Y, Yamamoto M, Ogawa K, Saika S. <i>Protective effects of human urinary trypsin inhibitor against trypsin-induced relaxation in rat aorta.</i> <i>Crit Care Med</i> 1996 Nov;24(11):1903-7		
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<div style="position: absolute; left: -100px; top: -100px; border: 1px solid black; border-radius: 50%; padding: 5px; transform: rotate(-45deg);"> TYPE 13C177 MAY 04 2001 PATENT & TRADEMARK OFFICE </div> <p style="text-align: center;"> INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449) </p>		ATTY. DOCKET NO. 114232.104	SERIAL NO. 09/518,081
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		OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
<input checked="" type="checkbox"/>	CBQ	Patel R.P., et al. in <i>Biochim Biophys Acta</i> 1999, 1411, 385-400	
<input checked="" type="checkbox"/>	CBR	Patel T, Gores GJ, Kaufmann SH. <i>The role of proteases during apoptosis. FASEB J</i> 1996 Apr;10(5):587-97	
<input checked="" type="checkbox"/>	CBS	Pellegrini A, Thomas U, Franchini M, Stockli M, Klauser S, Hunziker P, von Fellenberg R. <i>Identification of an aprotinin antiviral domain. FEBS Lett</i> 1994 May 16;344(2-3):261-5	
<input checked="" type="checkbox"/>	CBT	Pezzilli R, Gullo L, Ricchi E, Costigliola P, Sprovieri G, Pilati G, Fontana G., " <i>Serum pancreatic enzymes in HIV-seropositive patients</i> ", <i>Dig Dis Sci</i> , 37(2):286-8 (Feb 1992)	
<input checked="" type="checkbox"/>	CBU	Popko B. and Baerwald, K. D. in <i>Neurochem Res</i> 1999, 24, 33 1	
<input checked="" type="checkbox"/>	CBV	Premack, B. A. and Schall, T. J., " <i>Chemokine Receptors: Gateways to Inflammation and Infection</i> ", <i>Nature Medicine</i> , 2, 1174-1178 (1996)	
<input checked="" type="checkbox"/>	CBW	Pryor WA, Dooley MM, Church DF. <i>Mechanisms of cigarette smoke toxicity: the inactivation of human alpha-1-proteinase inhibitor by nitric oxide/isoprene mixtures in air. Chem Biol Interact</i> 1985 Jul;54(2):171-83	
<input checked="" type="checkbox"/>	CBX	Punjabi, C. J. et al., in <i>J. Immunol.</i> 1992, 149, 2179	
<input checked="" type="checkbox"/>	CBY	Rehman A, Whiteman M, Halliwell B. <i>Scavenging of hydroxyl radicals but not of peroxynitrite by inhibitors and substrates of nitric oxide syntheses. Br J Pharmacol</i> 1997 Dec; 122(8):1702-6	
<input checked="" type="checkbox"/>	CBZ	<i>Remington's Pharmaceutical Sciences</i> 1990, pp. 1519-1675, Gennaro, A. R., ed., Mack Publishing Company, Easton, PA.	
<input checked="" type="checkbox"/>	CCA	Scharpe S, De Meester I, Hendriks D, Vanhoof G, van Sande M, Vriend G, " <i>Proteases and their inhibitors: today and tomorrow</i> ", <i>Biochimie</i> , 73(1):121-126 (Jan 1991)	
<input checked="" type="checkbox"/>	CCB	Schini et al. in <i>Circ Res</i> 1994, 74, 24	
<input checked="" type="checkbox"/>	CCC	Schwartz, et al., " <i>Antiviral activity of the proteasome on incoming human immunodeficiency virus type I</i> ", <i>J Virol</i> , 72(5):3845-50 (1998)	
<input checked="" type="checkbox"/>	CCD	Sharpstone D, Rowbottom A, Nelson M, Gazzard B. <i>Faecal alpha 1 antitrypsin as a marker of gastrointestinal disease in HIV antibody positive individuals. Gut</i> 1996 Feb;38(2):206-10	
<input checked="" type="checkbox"/>	CCE	Shimizu T, Pommier Y. <i>DNA fragmentation induced by protease activation in p53-null human leukemia HL60 cells undergoing apoptosis following treatment with the topoisomerase I inhibitor camptothecin: cell-free system studies. Exp Cell Res</i> 1996 Aug 1;226(2):292-301	
<input checked="" type="checkbox"/>	CCF	Sichko ZhV, Kozlova OL. <i>Experience in treating a herpetic infection with trypsin</i> [Article in Russian]. <i>Vrach Delo</i> 1991 Mar;(3):86-9	
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CCG	Smith, M. E. in <i>Neurochem Res</i> 1999, 24, 261		
CCH	Szeghy G, Kenyeres B. <i>On the therapy of herpes simplex keratitis with heparin and trypsin.</i> [Article in German] <i>Klin Monatsbl Augenheilkd</i> 1968;153(6):827-30		
CCI	Tang et al.; "Inactivation of HIV-1 by trypsin and its use in demonstrating specific virus infection of cells", <i>J Virol Methods</i> 33(1-2):39-46 (Jun 1991)		
CCJ	Turpin JA, Schaeffer CA, Bu M, Graham L, Buckheit RW Jr, Clanton D, Rice WG, "Human immunodeficiency virus type-1 (HIV-1) replication is unaffected by human secretory leukocyte protease inhibitor", <i>Antiviral Res</i> , 29(2-3):269-77 (Mar 1996)		
CCK	Van Molle W, Libert C, Fiers W, Brouckaert P. <i>Alpha 1-acid glycoprotein and alpha 1-antitrypsin inhibit TNF-induced but not anti-Fas-induced apoptosis of hepatocytes in mice.</i> <i>J Immunol</i> 1997 Oct 1;159(7):3555-64		
CCL	Vollenweider F, Benjannet S, Decroly E, Savaria D, Lazure C, Thomas G, Chretien M, Seidah NG, "Comparative cellular processing of the human immunodeficiency virus (HIV-1) envelope glycoprotein gp 160 by the mammalian subtilisin/kexin-like convertases", <i>Biochem, J</i> ;314(Pt2):521-32 (Mar 1996)		
CCM	Wood, E.R. et al. in <i>Biochem Biophys Res Commun</i> 1993,191, 767-74		
CCN	Zhirnov OP, Ovcharenko AV, Mel'nikova EE, Gaidamovich Sla, Bukrinskaia AG. <i>Antiviral activity of proteinase inhibitors in cultured cells infected with alpha-viruses.</i> <i>Mol Gen Mikrobiol Virusol</i> 1985 Dec;(12):30-6		
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